

Numbers and Operations
Lesson 3: Irrational Numbers
Math for Standards

Name _____

Date _____

EQ: What is the difference between rational and irrational numbers, and how are they used to solve problems?

Irrational numbers are numbers that cannot be written as _____.

Any decimal that does not _____ **AND** does not _____
is irrational.

You can never find the _____ of irrational numbers.

You will get an irrational number when you take the _____
of any number that is not a _____.

Example 1: Decide whether the following are rational or irrational. How do you know?

a. .15155155515555...

b. $\sqrt{27}$

Example 2: For which of the following can you not find the exact value? How do you know?

a. Area of a circle

b. Perimeter of a triangle

c. Volume of a cylinder

Example 3: A square has an area of 84 cm^2 . Is the length of a side rational or irrational?
How do you know?

Example 4: If the area of a circle is about 265 in^2 , between which two whole numbers is the length of the radius?

Example 5: Come up with 5 examples of numbers that are rational and irrational.

Rational

Irrational